

### CLAIM AMENDMENTS

1. to 45. (Canceled)

46. (Currently amended) ~~The method of claim 43, wherein the protein has~~

A method for treating arthritis or reducing inflammation in a subject, comprising administering to the subject a protein having at least one of the following properties:

a) it comprises the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:8;

b) it comprises the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9; or

c) it comprises a consecutive amino acid sequence that is at least 80% identical to a) or b) (or fragment thereof) which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

47. (Canceled)

48. (Currently amended) The method of ~~claim 47~~ claim 46, whereby the subject is treated for sepsis.

49. (Currently amended) The method of ~~claim 47~~ claim 46, whereby the subject is treated for arthritis.

50. (Previously Presented) The method of claim 49, whereby the subject is treated for rheumatoid arthritis.

51. (Currently amended) The method of ~~claim 47~~ claim 46, wherein the protein comprises an amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:8.

52. **(Currently amended)** The method of ~~claim 47~~ **claim 46**, wherein the protein comprises a fragment of the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:8, which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

53. **(Currently amended)** The method of ~~claim 47~~ **claim 46**, wherein the protein comprises a consecutive sequence that is at least 80% identical to the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:8 (or fragment thereof), which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

54. **(Currently amended)** The method of ~~claim 47~~ **claim 46**, wherein the protein comprises a consecutive sequence that is at least 95% identical to the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:8 (or fragment thereof), which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

55. **(Currently amended)** The method of ~~claim 47~~ **claim 46**, wherein the protein is a metalloprotease.

56. **(Previously Presented)** The method of ~~claim 47~~ **claim 46**, wherein the protein causes cleavage of the human p55 TNF receptor.

57. **(Previously Presented)** A method for treating arthritis or reducing inflammation in a subject, comprising administering to the subject a protein having at least one of the following properties:

a) it comprises an amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9; or

b) it comprises a consecutive amino acid sequence that is at least 80% identical to a) (or fragment thereof) which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

58. **(Previously Presented)** The method of claim 57, whereby the subject is treated for sepsis.

59. **(Previously Presented)** The method of claim 57, whereby the subject is treated for arthritis.

60. **(Previously Presented)** The method of claim 59, whereby the subject is treated for rheumatoid arthritis.

61. **(Previously Presented)** The method of claim 57, wherein the protein comprises an amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9.

62. **(Previously Presented)** The method of claim 57, wherein the protein comprises a fragment of the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9, which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

63. **(Previously Presented)** The method of claim 57, wherein the protein comprises a consecutive sequence that is at least 80% identical to the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9 (or fragment thereof), which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

64. **(Previously Presented)** The method of claim 57, wherein the protein comprises a consecutive sequence that is at least 95% identical to the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9 (or fragment thereof), which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

65. **(Canceled)**

66. **(Previously Presented)** The method of claim 57, wherein the protein causes cleavage of the human p55 TNF receptor.

67. **(Withdrawn)** A pharmaceutical composition comprising a protein formulated in an excipient for administration to treating arthritis or reducing inflammation in a human patient, wherein the protein has at least one of the following properties:

a) it comprises the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:8;

b) it comprises the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9;

c) it comprises a consecutive amino acid sequence that is at least 80% identical to a) or b) (or fragment thereof) which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

68. **(Withdrawn)** The pharmaceutical composition of ~~claim 64~~ claim 67, packaged in a kit with instructions for treating arthritis.

69. **(Withdrawn)** The pharmaceutical composition of ~~claim 64~~ claim 67, packaged in a kit with instructions for reducing inflammation.

70. **(Currently amended)** The method of ~~claim 47~~ claim 46, whereby the subject is treated for multiple sclerosis.

71. **(Currently amended)** The method of ~~claim 47~~ claim 46, whereby the subject is treated for sepsis.

72. **(Previously Presented)** The method of claim 57, whereby the subject is treated for multiple sclerosis.

73. **(Previously Presented)** The method of claim 57, whereby the subject is treated for sepsis.

74. **(Withdrawn)** The pharmaceutical composition of ~~claim 64~~ claim 67, packaged in a kit with instructions for treating multiple sclerosis.

75. **(Withdrawn)** The pharmaceutical composition of ~~claim 64~~ claim 67, packaged in a kit with instructions for treating sepsis.

76. (New) A method for treating arthritis or reducing inflammation in a subject, comprising administering to the subject a protein containing the amino acid sequence encoded in SEQ. ID NO:8.

77. (New) The method of claim 76, wherein the protein causes cleavage of the human p55 TNF receptor.

78. (New) The method of claim 76 whereby the subject is treated for sepsis.

79. (New) The method of claim 76 whereby the subject is treated for arthritis.

80. (New) The method of claim 76, whereby the subject is treated for rheumatoid arthritis.

81. (New) The method of claim 76, whereby the subject is treated for multiple sclerosis.

82. (New) A method for treating arthritis or reducing inflammation in a subject, comprising administering to the subject a protein containing the amino acid sequence encoded in SEQ. ID NO:9.

83. (New) The method of claim 82, wherein the protein causes cleavage of the human p55 TNF receptor.

84. (New) The method of claim 82 whereby the subject is treated for sepsis.

85. (New) The method of claim 82 whereby the subject is treated for arthritis.

86. (New) The method of claim 82, whereby the subject is treated for rheumatoid arthritis.

87. (New) The method of claim 82, whereby the subject is treated for multiple sclerosis.